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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/952,995	03/26/98	LEIJON	M 70560-2/8242

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EXAMINER

LABALLE, C

ART UNIT	PAPER NUMBER
2834	12

DATE MAILED:

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/952,995

Applicant(s)

LEIJON ET AL.

Examiner

Clayton E. LaBalle

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-22, 26, 27, 29-39 and 41-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-22, 26, 27, 29-39 and 41-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☒ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 17) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: _____.

Art Unit: 2834

After consideration of Applicant's response the examiner makes the following rejections:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4, 6-9, 14, 19, 22, 26-27, 29-33, 34, 37-38, 41 and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shildneck in view of Elton ('565).

Shildneck discloses the power plant having at least one motor essentially as claimed except for the winding having an inner layer having semiconducting properties, an insulating layer surrounding the inner layer and an outer layer having semiconducting properties.

Elton discloses a cable with stranded conductors surrounded by a first inner semiconducting insulation layer (104), an intermediate solid insulation layer (106) and an outer semiconducting insulation layer (110) which is connected to ground. Such an arrangement, as disclosed by Elton helps to prevent corona discharge between the cable and the surrounding elements.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided in the machine of Shildneck, an inner layer having semiconducting properties, an insulating layer surrounding the inner layer and an outer

Art Unit: 2834

layer having semiconducting properties, as disclosed by Elton, in order to prevent corona discharge from the winding.

Claims 3, 10 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shildneck in view of Elton ('565) and further in view of Elton ('116).

Shildneck and Elton ('565) disclose the plant essentially as claimed except for the insulations having the same thermal coefficient of expansion.

Elton ('116) teaches that it is well known to form different overlapping insulations with the same coefficient of thermal expansion in order to prevent thermal stress to separate and crack the materials to cause failure of the insulation (see lines 38-44, col.7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have formed the insulation of Shildneck and Elton ('565) such that the different layers of insulation had similar or the same coefficient of thermal expansion, as disclosed by Elton ('116), in order to prevent failure caused by thermal aging and cycling.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shildneck in view of Elton ('565) and further in view of Laurell.

Shildneck and Elton ('565) disclose the plant essentially as claimed except for providing the cable with some strands insulated from one another and a metal screen.

Art Unit: 2834

Laurell teaches forming a high voltage cable. Laurell teaches that it is well known to form the cable with the conductors clumped together (figure 1), or with some of the conductors separated and insulated from other conductors (see figure 2). Laurell also teaches providing a metal screen (5) which surrounds the conductor to provide support and EMF shielding.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have arranged the conductors of Shildneck and Elton ('565) such that some of the conductors were insulated from one another in order to provide a multiple core cable, and to have provided a metal screen surrounding the cable to shield it, as disclosed by Laurell.

Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shildneck in view of Elton ('565) and further in view of Bernhardt.

Shildneck and Elton ('565) disclose the plant essentially as claimed except for the specific dimensions of the cable and providing a static machine connected in series to limit the start current.

With respect to forming the cable with the specific claimed dimensions, it would have been an obvious matter of engineering design choice to have formed the cable with those specific dimensions, since applicant has not disclosed that those specific values solve any stated problem or is for any particular purpose and it appears that the invention would perform equally well with a cable having slightly larger or smaller

Art Unit: 2834

values. One of ordinary skill in the art would design the cable to carry the appropriate amount of current for the desired application.

Bernhardt teaches that it is well known to provide a series connected current limiting device (22) to protect the circuit from fault currents.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a static machine in series with the connection to the motor of Shildneck and Elton ('565) in order to protect the motor, as disclosed by Bernhardt.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shildneck in view of Elton ('565) and further in view of Hyde and Herr.

Shildneck and Elton ('565) disclose the plant essentially as claimed except for connecting the neutral point of the motor to ground through an impedance or directly.

Both Hyde and Herr teach that it is well known to connect the neutral point of a motor to ground. Hyde teaches connecting a sensor device between the neutral and ground, while Herr teaches connecting directly to ground. This helps to protect the motor and reduce harmonics caused by the floating neutral connection.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have connected the neutral point of the machine of Shildneck and Elton ('565) to ground, as shown by Hyde and Herr, in order to protect the machine and reduce harmonics.

Art Unit: 2834

Claims 20-21 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shildneck in view of Elton ('565) and further in view of Neumeyer.

Shildneck and Elton ('565) disclose the plant essentially as claimed except for the motor being connectable to the distribution line.

Neumeyer teaches providing an insulation for a High voltage machine such that it can withstand voltages greater than 36kV. Machines with such an insulation could be directly connected to the distribution lines with the need to step down the voltage.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have formed the machine of Elton ('565) such that it can withstand voltages in excess of 36kV, as disclosed by Neumeyer, in order to allow higher capacity operation of the machine.

Applicant's arguments with respect to claim 1-4, 6-22, 26-27, 29-39 and 41-44 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clayton E. LaBalle whose telephone number is (703) 308-0519. The examiner can normally be reached on Monday-Thursday from 6:30 AM-4:00 PM EST and every other Friday from 6:30 AM-3:00 PM EST. The above number is equipped with voice mail. The examiner can also be reached via E-mail at Clayton.Laballe@uspto.gov to schedule an interview.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez, can be reached on (703) 308-1371. The fax phone number for Technology Center 2800 is (703) 305-3432.

Art Unit: 2834

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-0956.

A handwritten signature in black ink, appearing to read "Clayton E. LaBalle". The signature is fluid and cursive, with the first name "Clayton" and last name "LaBalle" clearly distinguishable.

Clayton E. LaBalle
Primary Examiner
Art Unit 2834
February 11, 2000